Indicator Recommended with Reservations	Deaths from Cardiovascular Diseases
Justification	Cigarette smoking is considered the most preventable cause of cardiovascular disease. There were approximately 113,000 smoking-attributable cardiovascular disease deaths in 1998.
Definition	Number of deaths from cardiovascular disease per 1,000 population
Numerator	Resident deaths during a calendar year with ICD-9 codes of 390-398, 402, 404-405,410-414, 420-429, 429.2, 430-438 or ICD-10 codes I00-I09, I11, I13, I20-I51, I60-I69 as the underlying cause of death
Denominator	Total resident population for the same calendar year
Data Sources	Death certificate data from the National Center for Health Statistics Mortality Detail Files (numerator) and population estimates from the U.S. Bureau of the Census (denominator)
Frequency	Annual
Geographic Levels	National, State, and County
Demographic Categories	Age by Gender by Race/Ethnicity
Strengths	Readily available for many years in all states
Limitations	This indicator is only based on deaths; cases of morbidity from cardiovascular disease are not reflected in this indicator. Cardiovascular disease is not a single disease, but rather numerous diseases with different causes and risk factors. Cigarette smoking is one of many risk behaviors which may contribute to cardiovascular disease. The stability of this indicator is directly related to the size of the population in which these deaths occur. Therefore, this indicator may be unstable for less populated states and counties that have low numbers of annual deaths, especially when used for demographic subgroups. There also is variability in the procedures used within and across each state to determine cause of death.